

REMARKS

Reconsideration of the above-identified application in view of the amendment above and the remarks below is respectfully requested.

Claims 2, 3, 6 and 17 have been canceled in this paper. Claims 1, 11-13 and 15-16 have been amended in this paper. No new claims have been added in this paper. Therefore, claims 1, 4-5 and 7-16 are pending and are under active consideration.

Claim 6 stands rejected under 35 U.S.C. 112, second paragraph, “as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.” In support of the rejection, the Patent Office states the following:

Claim 6 recites the limitation “the counterpressure roller” in line 2. There is insufficient antecedent basis for this limitation in the claim.

Without acquiescing in the propriety of the rejection, Applicants note that claim 6 has been canceled in this paper. Therefore, the subject rejection is moot and should be withdrawn.

Claim 13 stands rejected under 35 U.S.C. 112, second paragraph, “as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.” In support of the rejection, the Patent Office states the following:

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP §2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt

as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 13 recites the broad recitation “rapidly detachable connection,” and the claim also recites “in particular, by means of a lever-actuated eccentric clamp” which is the narrower statement of the range/limitation.

Without acquiescing in the propriety of the rejection, Applicants have amended claim 13 by deleting the “in particular” phrase. As a result, the subject rejection has been obviated and should be withdrawn.

Claims 1-5, 7, 9-12, 14 and 16-17 stand rejected under 35 U.S.C. 102(b) “as being anticipated by ESSER (US Patent No. 4279949).” In support of the rejection, the Patent Office states the following:

Regarding claim 1, ESSER discloses a dosing device (scraper 5, sharp-edged end 6, entrance flank 7) that is arranged on an application roller (support roller 2) such that an adhesive sump (trough) is provided between the device and roller (ESSER: column 4, lines 42-51, column 6, lines 64-66 and Fig. 1). Said device (5, 6, 7) is arranged at a desired distance from the roller (2) so as to adjust the width of the dosing gap (ESSER: column 5, lines 4-19). The dosing device (5, 6, 7) of ESSER comprises multiple areas (5, 6, 7) that differ from each other and are optionally directed and arranged toward the application roller (2) in order to create a dosing gap jointly with the roller (2) (ESSER: column 6, lines 23-34 and Fig. 1, 5).

Regarding claim 2, ESSER discloses a dosing device (scraper 5, sharp-edged end 6, entrance flank 7) in which the areas (5, 6, 7) can differ from each other (ESSER: column 6, lines 24-26), and are selected by rotating the dosing device (5, 6, 7). Said areas (5, 6, 7) are oriented toward the application roller (support roller 2) (ESSER: column 6, lines 23-34 and Fig. 1, 5).

Regarding claim 3, one of the areas of the dosing device (scraper 5, sharp-edged end 6, entrance flank 7) of ESSER comprises a doctor blade as an active part (sharp-edged end 6)(ESSER: column 1, lines 29-33).

Regarding claim 4, the device of ESSER comprises at least one further area provided as an external surface area (entrance flank 7)(ESSER: column 6, lines 23-63 and Fig. 1).

Regarding claim 5, the device of ESSER comprises an edge of a doctor blade (sharp-edged end 6), the external surface (entrance flank 7) and the surface of the application roller (support roller 2) are smooth (ESSER: Fig. 1-2).

Regarding claim 7, ESSER discloses a dosing device (scraper 5, sharp-edged end 6, entrance flank 7) in which a selected area of the device (sharp-edged end 6, entrance flank 7) is arranged toward the surface of an application roller (support roller 2) by a mechanical controller device (ESSER: column 5, lines 29-36).

Regarding claim 9, ESSER discloses a dosing device in which, upstream of the application roller (support roller 2) in the supply direction of the substrate web (1), a guiding roller (guide roller 3) is provided for the adjustment of an arc of contact of the web (1) to the application roller (2) (ESSER: column 4, lines 37-41 and Fig. 1).

Regarding claim 10, ESSER discloses a dosing device in which an external surface area is part of a roller wall section (entrance flank 7) (ESSER: column 6, lines 23-63 and Fig. 1).

Regarding claim 11, the doctor blades (sharp-edged end 6) of the device of ESSER are adjusted to a dosing gap (pressing zone) width (ESSER: column 3, lines 40-56).

Regarding claim 12, ESSER discloses a device in which the doctor blades (sharp-edged end 6) are directed at an angle larger or smaller than 90° with respect to the application roller (support roller) (ESSER: column 4, lines 65-68 to column 5, lines 1-3 and Fig. 1, 2).

Regarding claim 14, ESSER discloses a dosing device in which the different areas (scraper 5, sharp-edged end 6, entrance flank

7) of the dosing device are evenly distributed about its circumference (roll body 12)(ESSER: Fig. 5).

Regarding claim 16, ESSER discloses a dosing device in which the set angle of the doctor blade (flank 6) can be adjusted in a mechanical fashion (ESSER: column 4, lines 65-68 to column 5, lines 1-3 and column 5, lines 25-39).

Regarding claim 17, ESSER discloses a dosing device for the application of adhesive to a substrate web (1) with an application roller (support roller 2) comprising a smooth surface, a dosing device (scraper 5, sharp-edged end 6, entrance flank 7) according to claim 1 that is allocated to the application roller (2), and a counterpressure roller (guide roller 3) opposite to the application roller (2) that carries a substrate web (1) (ESSER: column 4, lines 31-41, column 5, lines 20-28, and Fig. 1-2).

Insofar as the subject rejection relates to claims 2, 3 and 17, the rejection is moot in view of Applicants' cancellation of these claims in this paper. Insofar as the subject rejection relates to claims 1, 4-5, 7, 9-12, 14 and 16, Applicants respectfully traverse the subject rejection.

Claim 1, from which claims 4-5, 7, 9-12, 14 and 16 depend, has been amended in this paper and now recites “[d]osing device that is arranged on an application roller such that, between the dosing device and the application roller, an adhesive sump is provided, and that a dosing gap is provided between the dosing device and the application roller through which adhesive is supplied to the application roller to apply the adhesive from the application roller to one side of a substrate web and said dosing device comprises a first area directed to the dosing gap having a doctor blade characterized in that the dosing device comprises at least one further area which differs from the first area for creating a dosing gap and that the areas that differ from each other are selected by rotating the dosing device and are oriented towards the application roller.”

Support for the present amendment to claim 1 may be found in the present specification, for example, on page 9, first paragraph, and on page 10, first paragraph, as well as in the drawings.

As amended, claim 1 refers to a dosing device which is arranged relative to an application roller such that, between both, an adhesive sump is provided (see Fig. 2). Through a dosing gap between the dosing device and the application roller, a predefined adhesive film is provided on the application roller. This application roller applies the adhesive film to one side of the substrate. In order to enable different structures of the adhesive film or thicknesses of the adhesive film, a dosing device is provided having different areas to vary the dosing gap. Therefore, only a rotation of the dosing device is necessary so that a newly requested structure or film thickness of adhesive can be applied to the substrate web. These features are neither taught nor suggested by Esser.

Esser discloses a process for applying adhesive to a substrate. However, the Esser way of applying adhesive to a substrate is different from that of the present invention. According to Figs. 1 and 2 of Esser, the substrate is supported by the supporting roller 2 and is then passed through a gap between the supporting roller 2 and the applicator roller 4. This means that the adhesive is directly applied by the application roller 4 on one side of the substrate and is then passed through the gap between the supporting roller 2 and the applicator roller 4. Subsequent to this coating step, there is provided a scraper step, for which the scraper 5 is used. This means that the adhesive which is applied to the substrate web and is not needed will be removed by the scraper. By contrast, the present invention does provide only that structure of adhesive film and that amount of adhesive film to the application roller that is needed; therefore, the adhesive transported by the application roller is

then applied on one side of the substrate. Due to this construction, predefined adhesive structure can be applied on the substrate and only one single adhesive sump is necessary. Furthermore, it is not requested to adjust a second scraper or doctor blade, as is necessary in Esser to adjust the thickness of the adhesive film.

The same arguments apply to Fig. 2 of Esser. The only difference is that the substrate web will pass through the adhesive sump, instead of applying the adhesive on the substrate by an applicator roller.

To the extent that the Patent Office appears to be arguing that Esser discloses the provision of an adhesive sump between the entrance flank of the scraper and the substrate web, Applicants respectfully that this is not correct because, at this point, only the excess adhesive is removed. There is not provided any storage of an adhesive to be used for applying adhesive first on the application roller and then in a subsequent step onto the substrate web. This point applies as well to the application roller 4 in Figs. 1 and 2 of Esser. The application roller is passing an application bath, which is mentioned with reference number 9, and the adhesive is provided directly onto the web.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claim 6 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over ESSER in light of DAHLGREN (US Patent No. 3647525).”

Without acquiescing in the propriety of the rejection, Applicants note that claim 6 has been canceled in this paper. Therefore, the subject rejection is moot and should be withdrawn.

Claim 8 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over ESSER in light of REMER (US Patent No. 3565039).” In support of the rejection, the Patent Office states the following:

ESSER discloses a dosing device that meets the limitations of claim 1, but does not disclose any kind of temperature-regulating facility.

However, REMER discloses a web substrate coating facility (unit 20 and shell 22) arranged outside a system of rollers (26, 27, 24) that comprises a temperature-regulation coil (coil 32) (REMER: column 3, lines 36-70 and Fig. 1). REMER further teaches that temperature regulation of the region around the coating apparatus can facilitate various coating operations by, for example, evaporating a solvent vehicle which is absorbed by the web (REMER: column 3, lines 69-75 to column 4, lines 1-7).

One of ordinary skill in the art, motivated by a need to deliver a dosed coating comprising a solvent vehicle to a web substrate would have found it obvious at the time of the invention to place the dosing device of ESSER into the temperature-regulated facility of REMER, with the reasonable expectation that such a modification would allow for the rapid evaporation of the solvent.

Applicants respectfully traverse the subject rejection. Claim 8 depends from claim 1. Claim 1 is patentable over Esser for at least the reasons given above. Remer fails to cure all of the deficiencies of Esser with respect to claim 1. Therefore, based at least on its dependency from claim 1, claim 8 is patentable over the present combination of Esser and Remer.

Moreover, Applicants note that Remer discloses a printing and coating apparatus for continuously printing or coating in a non-flammable atmosphere a traveling web by depositing thereon a suitable ink or coating composition dispersed or dissolved in a heavy solvent vehicle,

followed by inline treating of the web. There is used an application roller 26 according to Fig. 1, which passes through a bath of coating material and then passes the doctor blade 29. Afterwards, the reverse roller removes the excess coating formulation from the application roller before applying this one onto the web. This is a common application practice, which differs from the claimed invention because there is not provided an adhesive sump between the dosing device and the application roller. Further, there is not provided a dosing device with at least two blades, which are rotatable with respect to the dosing gap.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 13 and 15 stand rejected under 35 U.S.C. 103(a) “as being unpatentable over ESSER in light of NORDBY (US Patent No. 6637330).” In support of the rejection, the Patent Office states the following:

ESSER discloses a dosing device that meets the limitations of claim 3, and further teaches that the doctor blades (sharp-edged end 6) are replicable (ESSER, column 5, lines 65-66), but does not disclose doctor blades that are connected to the body by a rapidly detachable lever-actuated eccentric clamp.

However, the use of such clamps to hold doctor blades is known in the art, as exemplified by NORDBY. NORDBY discloses a dosing device with doctor blades (4) that can be detached by turning a lever (handle 35) that actuates an eccentric clamp (clamping rail 5, beam 3)(NORDBY: column 10, lines 13-28, Fig. 13a-d). NORDBY further teaches that said doctor blades wear down rapidly (NORDBY: column 1, lines 41-55).

One of ordinary skill in the art, motivated by a need to maintain a sharp working surface on the doctor blades, would have found it obvious at the time of the invention to use lever-actuated eccentric clamps to affix doctor blades to the scrapers (5) of ESSER,

with the expected result that such a modification would allow for worn working surfaces to be replaced quickly.

Applicants respectfully traverse the subject rejection. Claims 13 and 15 depend from claim 1. Claim 1 is patentable over Esser for at least the reasons given above. Nordby fails to cure all of the deficiencies of Esser with respect to claim 1. Therefore, based at least on their respective dependencies from claim 1, claims 13 and 15 are patentable over the present combination of Esser and Nordby.

Moreover, Applicants note that, whereas Nordby discloses a doctor blade system with a clamping device, this document does not disclose any dosing device or an arrangement comprising a dosing device and applicator roller for creating a dosing gap and for applying the adhesive to one side of a substrate.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

In short, none of the references teach or suggest, amongst other things, the positioning of the dosing device and an application roller in such a manner that, between the two, an adhesive sump is built nor do the references teach or suggest that the substrate web on which the adhesive has to be applied is not passed through the adhesive sump.

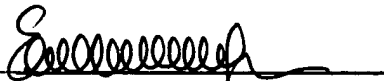
In conclusion, it is respectfully submitted that the present application is now in condition for allowance. Prompt and favorable action is earnestly solicited.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is

required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.

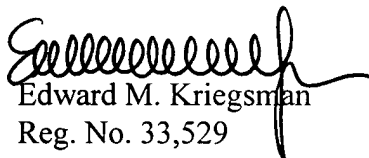
Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA D.C. 22313-1450 on January 14, 2010


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